

**REMARKS**

This Application has been carefully reviewed in light of the final Office Action mailed April 19, 2004 (the "Office Action") and the Advisory Action mailed July 9, 2004 (the "Advisory Action"). The Office Action rejects Claims 37-46 and 85-94. Applicants add new Claims 108-117. Applicants respectfully request reconsideration and favorable action in this case.

**Section 102 Rejections – Claims 37-40, 42, 44-46, 85-88, 90 and 92-94**

The Examiner rejects Claims 37-40, 42, 44-46, 85-88, 90 and 92-94 under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent No. 6,414,955 issued to Clare et al. ("*Clare*"). Applicants respectfully traverse these rejections for the reasons discussed below.

To anticipate a claim, each and every limitation must be found in a reference. *See* M.P.E.P. § 2131. "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) (*emphasis added*). In addition, the elements must be arranged as required by the claim. *See In re Bond*, 910 F.2d 831 (Fed. Cir. 1990).

Claim 37 recites "after reconfiguring the wireless node, transitioning the wireless node to a normal operating state in response to determining the operational data is within predefined parameters." Claim 85 includes a similar element. The Advisory Action states that the element in response to determining the operational data is within predefined parameters "is taught by the further action of being able to receive updates from other nodes joining the system." Advisory Action, page 2. The Advisory Action further states:

In other words, if the operational data is not within the predefined parameters then the node would not be able to receive further updates and would 'time-out', see e.g., column 14, lines 12-35. When a new node is started up it has an initial idea of the relative position of other active nodes/inviting nodes based on predefined operational data along with operational parameters used to initiate communication with these nodes. As the new node leaves the learning state, the new node has a better understanding of the location of other active nodes/inviting nodes (one could argue an 'exact location' of these nodes) based on the revised operational data received from these nodes which is further used to adjust operational parameters to optimize communication with these

nodes. Thus the operational data is within predefined parameters since the new node is able to communicate with the inviting node/other active nodes.

*Id.*

As indicated above, the Examiner states that "if the operational data is not within the predefined parameters then the node would not be able to receive further updates and would 'time-out'" and cites to column 14, lines 12-35 to support this proposition. *Id.* However, this cited portion of *Clare* generally describes a new node receiving network information to become a part of the network. There is no disclosure either in this cited portion or any other portion of *Clare* for "timing out" if the node is not able to receive further updates as a result of operational data not within predefined parameters. Even if such disclosure existed, there is no disclosure in *Clare* for "after reconfiguring the wireless node, transitioning the wireless node to a normal operating state in response to determining the operational data is within predefined parameters." Applicants point out that the Examiner concludes the Advisory Action paragraph quoted above (a general paragraph purporting to describe disclosure of *Clare* without citations thereto that support such disclosure) by stating "[t]hus the operational data is within predefined parameters since the new node is able to communicate with the inviting node/other active nodes." Advisory Action, page 2. However, Applicants note that in the Office Action and the Advisory Action, the Examiner cites to portions of *Clare* as supporting disclosure of Applicants' claimed start up state and learning state in which nodes of *Clare* are communicating with the inviting node and other active nodes. *See, e.g.,* Office Action, page 3 and Advisory Action, page 2. Thus, being able to communicate with an inviting node or other nodes does not provide disclosure of in response to determining the operational data is within predefined parameters that triggers "transitioning the wireless node to a normal operating state" after reconfiguring the wireless node if such communication is also used to allege support for the start up state and learning state. The Examiner has not even identified the specific predefined parameters disclosed in *Clare*.

Applicants appreciate the Advisory Action's clarification that "the examiner has combined various steps from each embodiment [of *Clare*] as they read on the claims." Advisory Action, page 2. However, this does not nullify the explicit requirement that to support an anticipation rejection, the identical invention must be shown in as complete detail

as is contained in the claim and must be arranged as required by the claim. *See Richardson* 868 F.2d at 1236; *see also In re Bond*, 910 F.2d 831. To anticipate Claim 37, a reference must disclose a wireless node having a start up state in which a plurality of operating parameters for the wireless node are automatically determined and the node is configured based on the operating parameters; a learning state to which the node is transitioned, during which operational data is collected, operating parameters are modified based on the operational data and the node is reconfigured based on the modified operating parameters; and a normal operating state to which the node is transitioned in response to determining the operational data is within predefined parameters. The Examiner has not provided disclosure in *Clare* for Claim 37 in as complete detail as is claimed and arranged as required by the claim, nor does *Clare* contain such disclosure. A similar argument applies to the elements of Claim 85.

Therefore, for at least these reasons, Applicants respectfully submit that Claims 37 and 85 are patentable over the cited art used in the rejections and request that the rejections to Claims 37 and 85 be withdrawn.

Claims 38-40, 42 and 44-46 each depends from Claim 37 and therefore includes each of the elements of Claim 37. Applicants thus respectfully request that the rejections of Claims 38-40, 42 and 44-46 be withdrawn because, as discussed above, Claim 37 is patentable over the cited art used in the rejection..

Claims 86-88, 90 and 92-94 each depends from Claim 85 and therefore includes each of the elements of Claim 85. Applicants thus respectfully request that the rejections of Claims 86-88, 90 and 92-94 be withdrawn because, as discussed above, Claim 85 is patentable over the cited art used in the rejection.

#### **Section 103 Rejections – Claims 41, 43, 89 and 91**

The Examiner rejects Claims 41, 43, 89 and 91 under 35 U.S.C. § 103(a) as being unpatentable over *Clare* in view of "On the Performance of a Routing Protocol for the Reconfigurable Wireless Network" to Haas et al. ("*Haas*"). Applicants respectfully traverse

these rejections for the reasons discussed below. Applicants respectfully traverse these rejections for the reasons discussed below.

Claims 41 and 43 each depends from Claim 37 and therefore includes each of the elements of Claim 37. Applicants thus respectfully request that the rejections of Claims 41 and 43 be withdrawn because, as discussed above, Claim 37 is patentable over the cited art used in the rejection.

Claims 89 and 91 each depends from Claim 85 and therefore includes each of the elements of Claim 85. Applicants thus respectfully request that the rejections of Claims 89 and 91 be withdrawn because, as discussed above, Claim 85 is patentable over the cited art used in the rejection.

Claim 41 recites "collecting operational data in the normal operating state and transitioning back to the learning state in response to determining the operational data is outside the predefined parameters." Claim 89 recites a similar element. The Office Action contends that *Clare* teaches transitioning back to a learning state. *See* Office Action, page 4. The Office Action also states that *Haas* "teaches the further recited limitation above at e.g., left hand column page 102." Office Action, page 6. However, the Office Action does not cite to a specific portion of this column of *Haas* as disclosing collecting operational data in the normal operating state and transitioning back to the learning state in response to determining the operational data is outside the predefined parameters, nor does the cited column disclose these elements. The cited column of *Haas* broadly discusses reconfigurable wireless networks, but does not disclose, teach or suggest determining the operational data is outside predefined parameters.

In addition, the Advisory Action states that "in addition to the passages cited by the examiner in the rejection, *Clare* also teaches that a node can reinitialize and thus leave the normal operating state and enter the learning state to relearn the network topology." Advisory Action, page 2. However, merely reinitializing to relearn network topology does not disclose, teach or suggest transitioning back to the learning state in response to

determining the operational data is outside the predefined parameters. There is no disclosure in *Clare* for making any determination that operational data is outside predefined parameters.

Claim 43 recites "transitioning from the normal operating state back to the learning state in response to accepting a modification in operating parameters requested by a neighboring node." Claim 91 recites a similar element. In a similar manner to the rejection of Claim 41 discussed above, the Office Action states that *Haas* "teaches the further recited limitation above at e.g., left hand column page 102." Office Action, page 6. However, the Office Action does not cite to a specific portion of this column of *Haas* as disclosing transitioning from the normal operating state back to the learning state in response to accepting a modification in operating parameters requested by a neighboring node, nor does the cited column disclose these elements. The cited column of *Haas* broadly discusses reconfigurable wireless networks, but does not disclose, teach or suggest accepting a modification in operating parameters requested by a neighboring node.

In addition, Applicants note that despite the Advisory Action's contention that *Clare* teaches that a node can reinitialize to relearn network topology, there is no disclosure in *Clare* of transitioning from the normal operating state back to the learning state in response to accepting a modification in operating parameters requested by a neighboring node. There is no disclosure in *Clare* for any acceptance of a modification in an operating parameter requested by a neighboring node.

In addition, the M.P.E.P. sets forth a strict legal standard for finding obviousness based on a combination of references. According to the M.P.E.P., "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge [that was] generally available to one of ordinary skill in the art" at the time of the invention. M.P.E.P. § 2143.01. The Office Action suggests that *Haas* provides a motivation for combination with *Clare* on "page 104, right-hand column." Office Action, page 7. However, this cited column of *Haas*

discloses the performance of a zone routing scheme. There is no motivation in this cited column for combining any portion of *Haas* with the teachings of *Clare*.

Therefore, for at least these additional reasons, Applicants respectfully submit that Claims 41, 43, 89 and 91 are patentable over the cited art used in the rejections and request that the rejections of these claims be withdrawn.

### **New Claims**

Applicants add new Claims 108-117. Claims 108-117 contain no new matter and are fully supported by the specification as filed.

Claims 108 and 113 each includes elements of Claims 37 and 85, respectfully, not disclosed in the cited art used in the rejection as discussed above. In addition, Claims 108 and 113 each includes operational data comprising "at least one of a call block percentage, an access failure percentage, a packet error rate and a frame error rate" and predefined parameters "associated with at least one of a call block percentage, an access failure percentage, a packet error rate and a frame error rate" which are not disclosed in the cited art used in the rejections.

Claims 109-112 and 114-117 each depends, either directly or indirectly, from either Claim 37 or Claim 85. Applicants respectfully submit that Claims 109-112 and 114-117 are allowable over the cited art used in the previous rejections for at least the reasons discussed above with respect to Claims 37 and 85. In addition, the cited art used in the rejections does not disclose, teach or suggest predefined parameters comprising "efficiency thresholds" (Claims 109 and 114); operating parameters comprising "coverage parameters determined to maximum radio coverage of the wireless node" (Claims 110 and 115); operating parameters comprising "interference parameters determined to minimize interference associated with the wireless node" (Claims 111 and 116); or transitioning a wireless node to a normal operating state in response to determining the operational data is within predefined parameters "for a specified period of time" (Claims 112 and 117).

Therefore, for at least the reasons discussed above, Applicants respectfully request allowance of Claims 108-117.

**CONCLUSIONS**

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicants hereby request a telephone conference with the Examiner and further request that the Examiner contact the undersigned attorney to schedule the telephone conference.

No fee is believed to be due. However, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.  
Attorneys for Applicants



Chad C. Walters  
Reg. No. 48,022

Date: August 19, 2004

**CORRESPONDENCE ADDRESS:**

BAKER BOTTS L.L.P.  
2001 Ross Avenue, Suite 600  
Dallas, Texas 75201-2980  
(214) 953-6511

Customer Number: **05073**